LEADING EUROPEAN SOFTWARE PRODUCT COMPANIES

Compiled for
Digital

By

INPUT LTD.

INPUT®

Piccadilly House, 33/37 Regent Street, London SW1Y 4NF 01-493-9335

AUGUST 1988

LEADING EUROPEAN SOFTWARE PRODUCT COMPANIES

Compiled for
Digital

By

INPUT LTD.

INPUT®

41 Dover Street, London W1X 3RB 01-493-9335

Table of Contents

I	Introduction	1
	A. Objectives	1
	B. Scope	1
	C. Methodology	2
II	Overview	3
III	Leading French-Owned Software Product Companies	9
IV	Leading German-Owned Software Product Companies	33
V	Leading U.K.-Owned Software Product Companies	55
VI	Leading Italian-Owned Software Product Companies	71
VII	Other Leading European-Owned Software Product Companies	89
VIII	Potentially Important Smaller Companies	101
A	Appendix: Definitions	123

Exhibits

II	-1	Leading Software Product Companies—Europe	4
III	-1	GSI	10
	-2	CGI	11
	-3	La Commande Electronique	12
	-4	CCMC	13
	-5	Thom 6	14
	-6	Sligos	15
	-7	Concept SA	16
	-8	ISE Cegos	17
	-9	France Image Logiciel	18
	-10	Telesystemes	19
	-11	Sema Metra	20
	-12	Steria	21
	-13	CDFI	22
	-14	Metsys	23
	-15	Syseca	24
	-16	Start Informatique	25
	-17	Cegid	26
	-18	AMI	27
	-19	TITN	28
	-20	Feeder	29
	-21	IBSI	30
	-22	Sinorg	31
IV	-1	Software AG	34
	-2	SAP	35
	-3	GEI	37
	-4	ADV/Orga	39
	-5	Krupp Atlas	40
	-6	Softlab	41
	-7	Schumann	42
	-8	MBP	43
	-9	DOS	44
	-10	GMO	45
	-11	Actis	46
	-12	DVO	48
	-13	Strassle	49
	-14	Integrata	50
	-15	PSI	51
	-16	RHV	52
	-17	Dicosoft	53
	-18	Soba Gruppe	54

V	-1	BIS	56
	-2	Thorn Software	57
	-3	CAP Group	58
	-4	CCF	59
	-5	CMG	60
	-6	Hoskyns	61
	-7	Logica	62
	-8	Peterborough	63
	-9	Scicon	64
	-10	Data Logic	65
	-11	Sherwood Computer Services	66
	-12	NMW	67
	-13	Pegasus	68
	-14	Micro Focus	69
VI	-1	Datamont	72
	-2	ITP Group	73
	-3	GE-DA	74
	-4	Engineering Informatica	75
	-5	Data Management	76
	-6	Enidata	77
	-7	SIME	78
	-8	Finsiel	79
	-9	Pirelli	80
	-10	Selesta	81
	-11	Sopin	82
	-12	CDS Group	83
	-13	SIPE Optimation	84
	-14	Lombardia	85
	-15	System Management	86
	-16	Praxis Calcolo	87
VII	-1	Hogia Data	90
	-2	Programmator	91
	-3	Multihouse	92
	-4	L & T Informatica	93
	-5	Orda-B	94
	-6	Administra	95
	-7	Winter Partners	96
	-8	ISAG	97
	-9	Voest Alpine AG	98
	-10	Management Data	99
VIII	-1	Progilog	102
	-2	Compagnie Europeene de Progiciel	103
	-3	Prodstar	104

-4	ASTR	105
-5	Alpha Informatique	106
-6	Europe Informatique	107
-7	B & S Multisoft	108
-8	Brainware	109
-9	LG Software	110
-10	Trifid Software	111
-11	Abtex	112
-12	Misys	113
-13	Computer Toepassing Bouwezen (CTB)	114
-14	ICS	115
-15	Systime AG	116
-16	Systor AG	117
-17	Dillon Technology	118
-18	Software Laboratories	119
-19	Kindle Group	120
-20	TAO SA	121

I

Introduction

I
Introduction

A
Objectives

The objectives of this study, as agreed between DIGITAL and INPUT, were the following:

1. To identify:

(a) The top 80 European-owned software companies in Europe.

(b) 20 smaller software companies that might potentially be strategically important to DIGITAL, and could be described as 'fast-growing' or involved in 'emerging technologies'.

2. To provide a ranking list showing the companies in 1(a) above plus the most important U.S. software companies active in the European market.

3. To provide short profiles of the 100 companies in 1(a) and 1(b) above.

B
Scope

The companies covered do not include hardware manufacturers (or companies owned by hardware manufacturers), but do include those owned by other organisations, such as industrial groups, etc.

Included are companies that develop standard software products (systems and applications). Companies that are only involved in the distribution of software products do not come under the scope of the study.

The company profiles contain the following details:

- Name, address and telephone number of company
- Ownership
- Number of employees

- Total revenues in 1987 (not just software product revenues)
- Type of software produced—i.e., (a) whether systems or applications and (b) which hardware platforms
- Geographic coverage

C Methodology

The data and information provided in this study was obtained from INPUT's in-house files and research resources as well as via telephone interviews undertaken specifically for this project.

II

Overview

II
Overview

Exhibit II-1 shows the leading software product companies active in the European market.

The prime aim here is to show the leading European-owned software product companies, ranked according to the level of revenues they derive from software products.

In order to gauge the relative importance of the American independent software product vendors in the European market, INPUT has included the leading five (Computer Associates, Microsoft, Ashton Tate, Lotus and MSA) in the ranking.

The computer hardware manufacturers are not included in the list.

EXHIBIT II-1

Leading Software Product Companies—Europe

Rank	Company Name	Country of Origin
1	Computer Associates	USA
2	Microsoft	USA
3	Software AG	D
4	SAP	D
5	Ashton Tate	USA
6	BIS	GB
7	Lotus	USA
8	MSA	USA
9	GSI	F
10	GEI	D
11	Thorn Software	GB
12	CGI	F
13	CAP Group	GB
14	ADV/Orga	D
15	La Commande Electronique	F
16	CCMC	F
17	Thom 6	F
18	Datamont	I
19	ITP Group	I
20	Sligos	F

EXHIBIT II-1 (continued)

Rank	Company Name	Country of Origin
21	GE-DA	I
22	Engineering Informatica	I
23	CCF	GB
24	Concept SA	F
25	ISE Cegos	F
26	Data Management	I
27	Enidata	I
28	France Image Logiciel	F
29	Telesystemes	F
30	Sema Metra	F
31	CMG	GB
32	Steria	F
33	Hoskyns	GB
34	Multihouse	NL
35	Krupp Atlas	D
36	L & T Informatica	NL
37	SIME	I
38	Softlab	D
39	CDFI	F
40	Logica	GB
41	Peterborough	GB

EXHIBIT II-1 (continued)

Rank	Company Name	Country of Origin
42	Scicon	GB
43	Finsiel	I
44	Schumann	D
45	Data Logic	GB
46	MBP	D
47	Metsys	F
48	Pirelli	I
49	Selesta	I
50	Syseca	F
51	Sopin	I
52	Sherwood Computer Services	GB
53	CDS Group	I
54	Hogia Data	S
55	Start Informatique	F
56	SIPE Optimation	I
57	DOS	D
58	Cegid	F
59	AMI	F
60	GMO	D
61	Actis	D

EXHIBIT II-1 (continued)

Rank	Company Name	Country of Origin
62	TITN	F
63	Feeder	F
64	IBSI	F
65	DVO	D
66	Lombardia	I
67	Winter Partners	CH
68	System Management	I
69	NMW	GB
70	Strassle	D
71	Pegasus	GB
72	Voest Alpine AG	A
73	Sinorg	F
74	Integrata	D
75	Micro Focus	GB
76	PSI	D
77	ISAG	CH
78	RHV	D
79	Dicosoft	D
80	Programmator	S

EXHIBIT II-1 (continued)

Rank	Company Name	Country of Origin
81	Orda - B	B
82	Management Data	A
83	Administra	B
84	Praxis Calcolo	I
85	Soba Gruppe	D

D = West Germany, F = France, GB = United Kingdom, I = Italy,
S = Sweden, NL = Netherlands, B = Belgium, A = Austria,
CH = Switzerland

Leading French-Owned Software Product Companies

III
Leading French-Owned Software Product Companies

Exhibits III-1 through III-22 provide details for each of the selected software product companies in France.

EXHIBIT III-1

Company Name:	**GSI**		
Address:	25 Boulevard de l'Amiral-Bruix 75782 Paris Cedex 16 France		
Tel. No.:	(1) 45 02 74 75		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Employee Owned)
No. of Employees:	2050		
Total Revenues (1987):	1386M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Payroll, management, production (MRP), accounts, motor trade
Hardware Platforms:	Payroll: minis and micros; Management: Digital; Accounts & Motor Trade: IBM		
Geographic Coverage:	France, Switzerland, Italy, Spain, U.S. (expansion planned elsewhere)		

EXHIBIT III-2

Company Name:	**CGI (Compagnie Generale d'Informatique)**		
Address:	28-34 Rue du Chateau des Rentiers 75640 PARIS Cedex 13 France		
Tel. No.:	(1) 40 77 20 00		
Ownership:	Public	[X]	Second Marche
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	1729		
Total Revenues (1987):	707M FF		
Type of Software Produced:	Systems	[X]	Software Engineering (Pacbase)
	Applications	[X]	Human Resources, Finance, Banking
Hardware Platforms:	Moving from mainframe only to micros (MS/DOS) and micro/mainframe links		
Geographic Coverage:	France 79%, Europe, U.S. (Pacbase)		

EXHIBIT III-3

Company Name:	**La Commande Electronique**		
Address:	7 Rue des Prias 27920 - St. Pierre de Bailleul France		
Tel. No.:	32 52 54 02		
Ownership:	Public	[X]	Second Marche
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	190		
Total Revenues (1987):	243M FF		
Type of Software Produced:	Systems	[X]	Mainly translation (and distribution) of Ashton Tate products for French-speaking markets.
	Applications	[X]	The company also develops some software in-house.
Hardware Platforms:	Microcomputers		
Geographic Coverage:	France and other French-speaking countries		

EXHIBIT III-4

Company Name:	**CCMC**		
Address:	99-115 Quai du Pdt Roosevelt 92136 Issy-les-Moulineaux France		
Tel. No.:	45 54 95 94		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	1423		
Total Revenues (1987):	951M FF		
Type of Software Produced:	Systems	[ ]	
	Applications	[X]	Accountancy
Hardware Platforms:	Mainly micros		
Geographic Coverage:	93% France		

EXHIBIT III-5

Company Name:	**Thom 6**		
Address:	33 Rue de Vouille 75015 Paris France		
Tel. No.:	48 56 31 11		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Thomson CSF)
No. of Employees:	376		
Total Revenues (1987):	285M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	PROCONSUL and CERG (Admin/Accountancy); SCOPS, EXCALIBUR, ORDO, CMS (Facility Management).
Hardware Platforms:	UNISYS/APOLLO BULL/SUN DECVAX/VALID IBM/		
Geographic Coverage:	France		

EXHIBIT III-6

Company Name:	**Sligos**		
Address:	Immeuble Ile de France 3 Place de la Pyramide 92067 Paris La Defense France		
Tel. No.:	49 00 90 00		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	2736		
Total Revenues (1987):	1397M FF		
Type of Software Produced:	Systems	[X]	System conversion (e.g., DOS to MVS)
	Applications	[X]	Funds and information transfer, commercial (A/C, pay, management), production
Hardware Platforms:	• Commercial - IBM 38 and micros • Videotex etc - IBM		
Geographic Coverage:	France 95%, Scandinavia, New subsidiary in Italy		

EXHIBIT III-7

Company Name:	**Concept SA**		
Address:	7 Rue Casteja 92100 Boulogne Billancourt France		
Tel. No.:	46 09 95 15		
Ownership:	Public	[X]	Second marche
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	350		
Total Revenues (1987):	195M FF		
Type of Software Produced:	Systems	[ ]	
	Applications	[X]	Complete Range: Treasury, Accounting, Financial Management
Hardware Platforms:	Micros		
Geographic Coverage:	France, Expanding abroad (e.g., into Italy)		

EXHIBIT III-8

Company Name:	**ISE Cegos**		
Address:	27-33 Quai de Gallo 92517 Boulogne, France		
Tel. No.:	(1) 46-09-28-28		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Cegos)
No. of Employees:	60		
Total Revenues (1987):	102M FF		
Type of Software Produced:	Systems	☐	Mainly retailer of US Products - manufacturer of applications s/w for micro
	Applications	☒	US products by SPC/Harvard Graphic/Micro Database System (MDS - Knowledge 3)
Hardware Platforms:	IBM and compatibles Apple		
Geographic Coverage:	France		

EXHIBIT III - 9

Company Name:	**France Image Logiciel**		
Address:	Tour Gallieni 2, 36, Av. Gallieni 93175 Bagnolet, France		
Tel. No.:	1-48-97-44-44		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: CGE/CAMIF/THOMSON)
No. of Employees:	75		
Total Revenues (1987):	104M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Games - Educational and Professional. Distributor of 'Micropros', 'Activision' and B.T. game s/w products
Hardware Platforms:	Micros IBM and compatibles Atari - Amiga		
Geographic Coverage:	France		

EXHIBIT III-10

Company Name:	**Telesystemes**		
Address:	115, Rue du Bac 75007 - Paris, France		
Tel. No.:	45-49-85-00		
Ownership:	Public	☐	
	Private	X	
	Subsidiary	X	(Parent co.: Cogecom)
No. of Employees:	2000		
Total Revenues (1987):	987M FF		
Type of Software Produced:	Systems	X	Software Engineering
	Applications	X	Videotex
Hardware Platforms:	Bull IBM DEC UNIX		
Geographic Coverage:	95% France		

EXHIBIT III-11

Company Name:	**Sema Metra**		
Address:	16 Rue Barbes 92126-Montrouge, France		
Tel. No.:	(1)-46-57-13-00		
Ownership:	Public	X	
	Private	☐	
	Subsidiary	☐	(Parent co.: 1988 merged with CAP Group. Paribas is major shareholder)
No. of Employees:	3100		
Total Revenues (1987):	1446M FF		
Type of Software Produced:	Systems	X	Software Engineering Tools
	Applications	X	Accounting, Energy applications, Banking
Hardware Platforms:	IBM BULL HP DIGITAL		
Geographic Coverage:	Europe, Africa, Asia, S. America		

EXHIBIT III-12

Company Name:	**Steria**		
Address:	147 Rue de Courcelles 75017 Paris, France		
Tel. No.:	47-63-11-83		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: 52% Soderi (Steria Employees) 29% BNP, 19% TOTAL (OFP))
No. of Employees:	1745		
Total Revenues (1987):	745M FF		
Type of Software Produced:	Systems	☒	Software Engineering
	Applications	☒	Banking, Communications
Hardware Platforms:	IBM DEC		
Geographic Coverage:	Subsidiaries in Belgium, Germany, Switzerland, Spain, Ivory Coast		

EXHIBIT III-13

Company Name:	**CDFI**		
Address:	Tour Albert 1er 65 Av. De Colmar 92507, Rueil-Malmaison, France		
Tel. No.:	(1)-47-32-92-34		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Charbonnages de France)
No. of Employees:	620		
Total Revenues (1987):	288M FF		
Type of Software Produced:	Systems	☒	(Minor %)
	Applications	☒	"Quotre" for administration. "Calenne" - maintenance."Page" - production.
Hardware Platforms:	IBM (Mini-m/f) 55% BULL (Mini-m/f) 45%		
Geographic Coverage:	France, Expanding activities in Spain, Italy, Germany, U.K.		

EXHIBIT III-14

Company Name:	**Metsys**		
Address:	4 Passage St Antoine 92508 Rueil-Malmaison, France		
Tel. No.:	1-47-32-92-57		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	350		
Total Revenues (1987):	142M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	IBM based - for admin., personnel, commerce and finance
Hardware Platforms:	IBM	100%	
Geographic Coverage:	France		

EXHIBIT III-15

Company Name:	**Syseca**		
Address:	315 Bureau de la Colline 92213 - Saint Cloud France		
Tel. No.:	(1)-49-11-70-00		
Ownership:	Public	☐	
	Private	X	
	Subsidiary	X	(Parent co.: Thomson - CSF)
No. of Employees:	1060		
Total Revenues (1987):	443M FF		
Type of Software Produced:	Systems	X	Software development products
	Applications	X	Commercial applications
Hardware Platforms:	MS/DOS APOLLO HP IBM		
Geographic Coverage:	98% France, Subsidiaries in the U.S.		

EXHIBIT III-16

Company Name:	**Start Informatique**
Address:	32 Rue de Cambrai 75019-Paris France
Tel. No.:	42-03-76-23
Ownership:	Public ☐
	Private ☒
	Subsidiary ☐ (Parent co.: _____)
No. of Employees:	350
Total Revenues (1987):	200M FF
Type of Software Produced:	Systems ☐
	Applications ☒ Administration
Hardware Platforms:	UNIX (32-bit) MS-DOS
Geographic Coverage:	France; possible expansion abroad in future

EXHIBIT III-17

Company Name:	**Cegid**		
Address:	123 Av. Barthelemy-Buyer 69005 Lyon France		
Tel. No.:	72-32-08-17		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	350		
Total Revenues (1987):	246M FF		
Type of Software Produced:	Systems	☒	
	Applications	☒	A/C and admin. systems
Hardware Platforms:	IBM HP DIGITAL	70%	
Geographic Coverage:	France		

EXHIBIT III-18

Company Name:	**AMI (Ateliers Mecanographiques D'Issy)**
Address:	126 Av Du Gal Leclerc/B.P. 80 92105 Boulogne Billancourt France
Tel. No.:	30-64-44-22
Ownership:	Public ☐
	Private ☒
	Subsidiary ☐ (Parent co.: _____)
No. of Employees:	378
Total Revenues (1987):	97M FF
Type of Software Produced:	Systems ☐
	Applications ☒ Stand-alone and networked micro products; publishing; craftsmen
Hardware Platforms:	Micros - MS/DOS and Sanco 9200/9300
Geographic Coverage:	France 100%

EXHIBIT III-19

Company Name:	**TITN**		
Address:	1 Rue Galvani 91300 Massy France		
Tel. No.:	69-30-04-14		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Alcatel (CGE))
No. of Employees:	600		
Total Revenues (1987):	355M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Electronic data transfer and general communications, industrial admin.
Hardware Platforms:	Mini and micro Variety of manufacturers		
Geographic Coverage:	France, USA		

EXHIBIT III-20

Company Name:	**Feeder**		
Address:	BP 78-1 13742-Vitrolles, France		
Tel. No.:	42-89-31-31		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	44		
Total Revenues (1987):	59M FF		
Type of Software Produced:	Systems	☒	Mainly distribution and support of micro products
	Applications	☒	
Hardware Platforms:	Micros		
Geographic Coverage:	France, North Africa		

EXHIBIT III-21

Company Name:	**IBSI**		
Address:	3 Chemin du Torey 69340-Francheville France		
Tel. No.:	78-34-80-40		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	791		
Total Revenues (1987):	267M FF		
Type of Software Produced:	Systems	☒	Application development tool, 'Conceptor'
	Applications	☒	Technical and scientific applications
Hardware Platforms:	IBM BULL DEC NIXDORF		
Geographic Coverage:	99% France		

EXHIBIT III-22

Company Name:	**Sinorg**		
Address:	7 Rue Royale 75008 Paris France		
Tel. No.:	42-65-56-80		
Ownership:	Public	☐	
	Private	X	
	Subsidiary	X	(Parent co.: Caisse des Depots - DVP)
No. of Employees:	729		
Total Revenues (1987):	415M FF		
Type of Software Produced:	Systems	X	
	Applications	X	Health care, administration
Hardware Platforms:	BULL IBM VARIOUS		
Geographic Coverage:	Worldwide; good position in Central Africa		

IV

Leading German-Owned Software Product Companies

IV
Leading German-Owned Software Product Companies

Exhibits IV-1 through IV-18 provide details for each of the selected software product companies in Germany.

EXHIBIT IV-1

Company Name:	**Software AG**		
Address:	Dehmelstr. 3 6100 Darmstadt W. Germany		
Tel. No.:	010-49-6151/5040		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	500 (Europe)	450 (N. America)	
Total Revenues (1987):	170M DM		
Type of Software Produced:	Systems	[X]	Specialises in application development and database management (Main products: ADABAS, NATURAL, PREDICT, COM-PLETE)
	Applications	[ ]	
Hardware Platforms:	Mainly IBM (and compatibles), Also DEC and Siemens		
Geographic Coverage:	Subsidiaries all over the world		

EXHIBIT IV-2

Company Name:	**SAP AG**		
Address:	Max-Planck-Str 8 6909 Walldorf W. Germany		
Tel. No.:	010-49-6227/340		
Ownership:	Public	X	
	Private	☐	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	420		
Total Revenues (1987):	150M DM		
Type of Software Produced:	Systems	☐	
	Applications	X	Real-time business software (production, planning, costing, accounting, management)
Hardware Platforms:	Mainly IBM SIEMENS NIXDORF SAP can also support UNIX		

Geographic Coverage: Subsidiaries in Austria, Switzerland, France, Spain, U.K. and the Netherlands.

EXHIBIT IV-3

Company Name:	**GEI**		
Address:	Pascalstr. 14 5100 Aachen W. Germany		
Tel. No.:	010-49-2408/130		
Ownership:	Public	☐	
	Private	X	
	Subsidiary	X	(Parent co.: AEG AG)
No. of Employees:	800		
Total Revenues (1987):	132M DM		
Type of Software Produced:	Systems	X	Information retrieval systems, information resource management, network/architecture, systems engineering, tools for s/w development
	Applications	X	Commercial applications: material, production, maintenance, accounting, personnel, PPS-systems
Hardware Platforms:	IBM DEC UNISYS		

Geographic Coverage: Germany, Switzerland, U.S. (ProMod Inc.)

EXHIBIT IV-4

Company Name:	**ADV/Orga F.A. Meyer AG**		
Address:	Kurt-Schumacher-str. 241 2940 Wilhelmshaven W. Germany		
Tel. No.:	010-49-4421/8021		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	650		
Total Revenues (1987):	87M DM		
Type of Software Produced:	Systems	[X]	Database management and related areas
	Applications	[X]	Wide range of commercial software (Adv/Orga also formerly distributed Cullinet software)
Hardware Platforms:	IBM, DEC HP UNISYS (in development)		
Geographic Coverage:	Germany, Austria, Switzerland		

EXHIBIT IV-5

Company Name:	**Krupp Atlas Datensysteme GmbH**		
Address:	Altendorferstr. 104 4300 Essen W. Germany		
Tel. No.:	010-49-201/188 8286		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Krupp Atlas Electronik)
No. of Employees:	360		
Total Revenues (1987):	84m DM		
Type of Software Produced:	Systems	☐	
	Applications	☒	Personnel, material, accounting, production planning, administration, development tools
Hardware Platforms:	IBM, Siemens, DEC Krupp Hardware; Software is for PCs, minis and mainframes		
Geographic Coverage:	Mainly Germany; Also: Austria, Switzerland, U.K., France		

EXHIBIT IV-6

Company Name:	**Softlab**		
Address:	Zamdorferstr. 120 8000 Munchen 80 W. Germany		
Tel. No.:	010-49-89/930010		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	350		
Total Revenues (1987):	85M DM		
Type of Software Produced:	Systems	☒	CASE-products, s/w engineering
	Applications	☒	Real-time management. Integrated manufacturing, production planning and control (PPS-systems), production automation, distribution information systems, office communication
Hardware Platforms:	IBM, AMDAHL, DEC NIXDORF, UNISYS		
Geographic Coverage:	Mainly Germany, Offices in Austria and U.S. (San Francisco)		

EXHIBIT IV-7

Company Name:	**Unternehmensgruppe Schumann**		
Address:	Aachenerstr. 1053-1055 5000 Koln 40 W. Germany		
Tel. No.:	010-49-221/489090		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	390		
Total Revenues (1987):	71M DM		
Type of Software Produced:	Systems NOMAD, ESS, DBC, IRP, IBIE	☒	Selling, adaption and installation products for the support of information control
	Applications	☒	Selling, adaption and installation—e.g., integrated calculation and planning systems accounting, finance, costing.
Hardware Platforms:	Broad range		
Geographic Coverage:	Subsidiaries in the USA and Israel		

EXHIBIT IV-8

Company Name:	**MBP Software & Systems GmbH**		
Address:	Semerteichstr. 47 4600 Dortmund 1 W. Germany		
Tel. No.:	010 49 231/43480		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Hoesch AG)
No. of Employees:	560		
Total Revenues (1987):	84M DM		
Type of Software Produced:	Systems	☒	Compiler: "mbp COBOL - 85"
	Applications	☒	• Real-time business s/w (costing, controlling) • Real-time computer-aided manufacturing • Office communication
Hardware Platforms:	• Mainly IBM • Also - Siemens - DEC - Nixdorf		
Geographic Coverage:	• German-speaking countries • Also office in California		

EXHIBIT IV-9

Company Name:	**Data Organisation Service (DOS) GmbH**
Address:	Gustav-Stresemann-Ring 12-16 6200 Wiesbaden W. Germany
Tel. No.:	010 49 6121/1610
Ownership:	Public ☐ Private ☒ Subsidiary ☐ (Parent co.: _____)
No. of Employees:	140
Total Revenues (1987):	22M DM
Type of Software Produced:	Systems ☐ Applications ☒ Commercial s/w personnel planning, training, budgeting, accounting
Hardware Platforms:	IBM and SIEMENS mainframes
Geographic Coverage:	West Germany, Ireland, England, Switzerland, Austria, Holland

EXHIBIT IV-10

Company Name:	**GMO (Gesellschaft für Managem. u. Organis.)**		
Address:	Alsterufer 36 2000 Hamburg 36 W. Germany		
Tel. No.:	010 49 40/44 18030		
Ownership:	Public	X	
	Private	☐	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	322		
Total Revenues (1987):	50M DM		
Type of Software Produced:	Systems	☐	
	Applications	X	Finance, costing, personnel, production
Hardware Platforms:	Mainly IBM		
Geographic Coverage:	Subsidiaries in Vienna and Zurich		

EXHIBIT IV-11

Company Name:	**ACTIS (Angewandte Computertechnik für Informationssysteme)**		
Address:	Waldburgstr. 17-19 7000 Stuttgart 80 W. Germany		
Tel. No.:	010 49 711/73790		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	130		
Total Revenues (1987):	18M DM		
Type of Software Produced:	Systems	☐	
	Applications	☒	• Applications solutions for production companies (distrib., stock control, material, production control, marketing, production planning (CAM)) • Banking applications solutions (packages)
Hardware Platforms:	IBM, Nixdorf, HP, SIEMENS, DEC		

Geographic Coverage:	West Germany, Austria, Switzerland, Spain, France, Holland, GB, Sweden

EXHIBIT IV-12

Company Name:	**DVO Datenverarbeitungs Service GmbH**		
Address:	Duisburgerstr. 375 4200 Oberhausen 1 W. Germany		
Tel. No.:	+ 49 208 8333210		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Dt. Babcock Beteiligungs GmbH)
No. of Employees:	210		
Total Revenues (1987):	48M DM		
Type of Software Produced:	Systems	☐	
	Applications	☒	Technical and commercial
Hardware Platforms:	Various		
Geographic Coverage:	Mainly W. Germany, Also Europe and U.S.		

EXHIBIT IV-13

Company Name:	**Strassle Datentechnik GmbH**		
Address:	Vaihingerstr. 169 7000 Stuttgart 80 W. Germany		
Tel. No.:	010 49 711/78910		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	223		
Total Revenues (1987):	72M DM		
Type of Software Produced:	Systems	☐	
	Applications	☒	PSK 2000 - package for production companies
Hardware Platforms:	Data General Hewlett-Packard		
Geographic Coverage:	Subsidiaries in Switzerland (Basle, Zurich), Also active in Austria		

EXHIBIT IV-14

Company Name:	**Integrata GmbH**		
Address:	Schleifmuhlenweg 68 7400 Tubingen W. Germany		
Tel. No.:	010 49 7071/4090		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	294		
Total Revenues (1987):	41.5M DM		
Type of Software Produced:	Systems	☐	Tools for s/w developm.
	Applications	☒	Developm. of administr. application systems (personnel, distribution, production planning (PPS))
Hardware Platforms:	SIEMENS		
Geographic Coverage:	West Germany, Switzerland		

EXHIBIT IV-15

Company Name:	**PSI Gesellschaft für Prozessteuerung und Informationssysteme mbH**		
Address:	Kurfurstendamm 67 1000 Berlin 15 W. Germany		
Tel. No.:	010 49 30/884230		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	340		
Total Revenues (1987):	47.2M DM		
Type of Software Produced:	Systems	☒	Software engineering
	Applications	☒	Production
Hardware Platforms:	Wide range		
Geographic Coverage:	Subsidiary in the Netherlands		

EXHIBIT IV-16

Company Name:	**RHV Software Projekte GmbH**		
Address:	Gothaerstr. 31 4030 Ratingen 1 W. Germany		
Tel. No.:	010 49 2102/4405-0		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: DAT Group)
No. of Employees:	140		
Total Revenues (1987):	18M DM		
Type of Software Produced:	Systems	☐	
	Applications	☒	CAD, accounting, ordering
Hardware Platforms:	IBM 50% SIEMENS 30% DEC 20%		
Geographic Coverage:	Subsidiary in Spain		

EXHIBIT IV-17

Company Name:	**Dicosoft**		
Address:	Friedrich Ebert Allee 73-75 5300 Bonn 1 W. Germany		
Tel. No.:	+ 49 228 53070		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: CDU (Political party))
No. of Employees:	55		
Total Revenues (1987):			
Type of Software Produced:	Systems	☐	
	Applications	☒	Administration, publishing, training
Hardware Platforms:	Wang Nixdorf Unix		
Geographic Coverage:	W. Germany, Benelux, France		

EXHIBIT IV-18

Company Name:	**Soba Gruppe**
Address:	Konigswintererstr. 29-37 15300 Bonn 3 W. Germany
Tel. No.:	010-49-228/40040
Ownership:	Public ☐
	Private ☒
	Subsidiary ☐ (Parent co.: _____)
No. of Employees:	125
Total Revenues (1987):	12.5M DM
Type of Software Produced:	Systems ☐
	Applications ☒ Commercial applications
Hardware Platforms:	IBM 100%
Geographic Coverage:	Germany, Austria, Switzerland, Netherlands, Sweden

Leading U.K.-Owned Software Product Companies

V
Leading U.K.-Owned Software Product Companies

Exhibits V-1 through V-14 provide details for each of the selected software product companies in the U.K.

EXHIBIT V-1

Company Name:	**BIS**		
Address:	20 Upper Ground London SE1 9PN		
Tel. No.:	01-633 0866		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Nynex U.S.)
No. of Employees:	1450		
Total Revenues (1987):	£68.1M		
Type of Software Produced:	Systems	☐	
	Applications	☒	Mainly banking
Hardware Platforms:	IBM System 36/38 IBM PC and compatibles		
Geographic Coverage:	U.K. 57%, Rest of Europe 16%, America 10%, S.E. Asia 9%, Australasia 7%, Africa 1%		

EXHIBIT V-2

Company Name:	**Thorn Software**		
Address:	Thomson House 296 Farnborough Road Farnborough Hants GU14 7NU		
Tel. No.:	0252 543333		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	X	(Parent co.: Thorn EMI plc)
No. of Employees:	2400		
Total Revenues (1987):	£110M (including Datasolve, Software Sciences and Thorn EMI Computer Software)		
Type of Software Produced:	Systems	X	Monitors
	Applications	X	Accounting, budgeting & planning, allocations, consolidation, project/ sales/purchase accounting Budget/Property Reporting
Hardware Platforms:	IBM Mainframe, DEC (VAX), Wang, Unisys, Siemens		
Geographic Coverage:	Worldwide		

EXHIBIT V-3

Company Name:	**CAP Group**		
Address:	233 High Holborn London W1CV 7DJ		
Tel. No.:	01-831 6144		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	1800		
Total Revenues (1987):	£90M		
Type of Software Produced:	Systems	[X]	Application development
	Applications	[X]	Finance, industry, communications
Hardware Platforms:	Various, including IBM PC and compatibles, DEC, VAX		
Geographic Coverage:	Mainly U.K. Subsidiary in the Netherlands. Merged with Sema Metra (France) to form Semacap.		

EXHIBIT V-4

Company Name:	**CCF Group plc**		
Address:	Eldon House 2-3 Eldon Street London EC2M 7LS		
Tel. No.:	01-377 9755		
Ownership:	Public	☒	
	Private	☐	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	300		
Total Revenues (1987):	£20M		
Type of Software Produced:	Systems	☐	
	Applications	☒	International banking packages
Hardware Platforms:	IBM DEC Tandem		
Geographic Coverage:	U.K. 70%, France, Rest of Europe		

EXHIBIT V-5

Company Name:	**Computer Management Group (CMG)**		
Address:	Sunley House Bedford Park Croydon Surrey CR02AP		
Tel. No.:	01-686 8251		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: CMG LTD)
No. of Employees:	500		
Total Revenues (1987):	£60M		
Type of Software Produced:	Systems	☐	
	Applications	☒	Pay, accounting, costing, personnel, finance
Hardware Platforms:	Unisys IBM PCs and mainframes Wang VS		
Geographic Coverage:	U.K. 47%, NL 51%, W. Germany 2%		

EXHIBIT V-6

Company Name:	**Hoskyns plc**		
Address:	Hoskyns House 130 Shaftesbury Avenue London W1V 7DN		
Tel. No.:	01-434 2171		
Ownership:	Public	☒	
	Private	☐	
	Subsidiary	☒	(Parent co.: Plessey - since July 1988)
No. of Employees:	1800		
Total Revenues (1987):	£79M		
Type of Software Produced:	Systems	☐	
	Applications	☒	Wide range, including leasing, broking, accounting, finance, costing, production management
Hardware Platforms:	DEC VAC, Microvax, PDP, IBM PC and compatibles, HP		
Geographic Coverage:	Offices and distributors in Ireland, Holland, Australia, New Zealand and Africa		

EXHIBIT V-7

Company Name:	**Logica UK Ltd**		
Address:	64 Newman Street London W1A 4SE		
Tel. No.:	01-637 9111		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	X	(Parent co.: Logica plc - public co.)
No. of Employees:	1720		
Total Revenues (1987):	£69M		
Type of Software Produced:	Systems	X	Computer performance analysis Network design system
	Applications	X	Graphics International financial communications
Hardware Platforms:	Apple Macintosh IBM PC and compatibles ICL DEC, PDP, VAX		
Geographic Coverage:	Exporting through local operating companies in Belgium, W. Germany, Italy, Netherlands, Sweden, USA, Australia and Hong Kong		

EXHIBIT V-8

Company Name:	**Peterborough Software**		
Address:	Thorpe Park, Peterborough PE3 6JY		
Tel. No.:	0733 41010		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: C E Heath)
No. of Employees:	240		
Total Revenues (1987):	£8.9M		
Type of Software Produced:	Systems	☐	
	Applications	☒	Payroll packages, packaged human resource management s/w
Hardware Platforms:	IBM mainframes and compatibles ICL From 1989 - UNIX		
Geographic Coverage:	Subsidiaries in Australia and New Zealand		

EXHIBIT V-9

Company Name:	**Scicon Ltd**		
Address:	Wavendon Tower, Wavendon Milton Keynes, MK17 8LX		
Tel. No.:	0908 585858		
Ownership:	Public	X	
	Private	☐	
	Subsidiary	☐	(Parent co.: Now joined with Systems Designers, forming SD-Scicon)
No. of Employees:	1200 (Scicon only)		
Total Revenues (1987):	£44.3M		
Type of Software Produced:	Systems	X	Includes IBM/DEC gateway facility
	Applications	X	Oil industry, finance, distribution, etc.
Hardware Platforms:	IBM DEC VAX Unisys, HP		
Geographic Coverage:	U.K., France, Germany, U.S.		

EXHIBIT V-10

Company Name:	**Data Logic Ltd**		
Address:	Queens House Greenhill Way Harrow, Middx HA1 1YR		
Tel. No.:	01 863 0383		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Raytheon)
No. of Employees:	750		
Total Revenues (1987):	£38M		
Type of Software Produced:	Systems	☒	"Sentinel" - UNIX transaction processing environment
	Applications	☐	Data Logic distributes applications products for some U.S. suppliers.
Hardware Platforms:	"Sentinel" - UNIX Other products - various		
Geographic Coverage:	U.K., U.S.A.		

EXHIBIT V-11

Company Name:	**Sherwood Computer Services plc**		
Address:	North House, St Edwards Way Romford RM1 4AR, Essex		
Tel. No.:	0708 24411		
Ownership:	Public	[X]	(USM)
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	360		
Total Revenues (1987):	£20M		
Type of Software Produced:	Systems	[ ]	
	Applications	[X]	Mainly insurance and finance applications
Hardware Platforms:	Prime ICL IBM + Others		
Geographic Coverage:	Predominantly U.K.		

EXHIBIT V-12

Company Name:	**NMW Computers plc**		
Address:	Stapeley House, London Road Nantwich, Cheshire,CW5 7JW		
Tel. No.:	0270 626023		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	300		
Total Revenues (1987):	£12M		
Type of Software Produced:	Systems	[ ]	
	Applications	[X]	Accounting financial markets
Hardware Platforms:	ICL, ITL Most micros		
Geographic Coverage:	Mainly U.K.		

EXHIBIT V-13

Company Name:	**Pegasus Software Ltd**		
Address:	Brikat House, Montagu Street Kettering, Northants, NN16 8XG		
Tel. No.:	0536 522822		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Formerly Brikat Group plc)
No. of Employees:	60		
Total Revenues (1987):	c. £5M		
Type of Software Produced:	Systems	☐	
	Applications	☒	Costing, payroll, stock control, invoicing, sales order processing
Hardware Platforms:	Most microcomputers		
Geographic Coverage:	U.K.		

EXHIBIT V-14

Company Name:	**Micro Focus plc**		
Address:	26 West Street Newbury, Berks, RG13 1JT		
Tel. No.:	0635 32646		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	100 (U.K.)		
Total Revenues (1987):	£13M		
Type of Software Produced:	Systems	[X]	COBOL packages
	Applications	[ ]	
Hardware Platforms:	IBM		
Geographic Coverage:	U.S. 50%, Europe, Australasia		

VI

Leading Italian-Owned Software Product Companies

VI
Leading Italian-Owned Software Product Companies

Exhibits VI-1 through VI-15 provide details for each of the selected software product companies in Italy.

EXHIBIT VI-1

Company Name:	**Datamont**		
Address:	Via Taramelli 20124 Milano ITALY		
Tel. No.:	02 6270 8680		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Montedison)
No. of Employees:	276		
Total Revenues (1987):	58B Lira		
Type of Software Produced:	Systems	☒	Production and office automation networks
	Applications	☐	
Hardware Platforms:	IBM (m/f) DIGITAL (m/f)		
Geographic Coverage:	Italy		

EXHIBIT VI-2

Company Name:	**ITP Group**		
Address:	P.2A Castello 18 2021 Milano Italy		
Tel. No.:	02 866614		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	200		
Total Revenues (1987):	38B Lira		
Type of Software Produced:	Systems	☐	
	Applications	☒	Steel production Shoemaking Textiles plants
Hardware Platforms:	Digital >50% According to customer needs		
Geographic Coverage:	Italy Cross shareholding with ITP Boston but the two groups are independent		

EXHIBIT VI-3

Company Name:	**GE-DA (CAP Gemini)**		
Address:	Via Combroso 54 20137 Milano, Italy		
Tel. No.:	02 54231		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: CAP Gemini)
No. of Employees:	500		
Total Revenues (1987):	57B Lira		
Type of Software Produced:	Systems	☐	
	Applications	☒	For administration - management decision support systems (WIZARD) Mainly for the public sector (85%)
Hardware Platforms:	Mainframe & mini IBM, Honeywell Unisys, VAX in decreasing order of importance		
Geographic Coverage:	Italy		

EXHIBIT VI-4

Company Name:	**Engineering Informatica spa**		
Address:	Corso Stati Uniti 23/c 35100 Padova, Italy		
Tel. No.:	010 39 49 870 0366		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	500		
Total Revenues (1987):	31B Lira		
Type of Software Produced:	Systems	☒	Network Management - EDP
	Applications	☒	For banks - industry and public sector - Retail of American products
Hardware Platforms:	IBM (mainframe)		80%
	Sperry		10%
	Digital		5%
	Honeywell		5%
Geographic Coverage:	Italy		

EXHIBIT VI-5

Company Name:	**Data Management**		
Address:	Viale Eginardo, 29 20149 Milano, Italy		
Tel. No.:	02 49931		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co. : Credito Italiano 48% Finsiel 29% H/W Bull Italia 16%)
No. of Employees:	600		
Total Revenues (1987):	55B Lira		
Type of Software Produced:	Systems	☒	Tools - distribution of products by McCormack, Millenium, Unilog
	Applications	☒	Admin. system for banks and personnel management
Hardware Platforms:	Mainframe IBM Mainframe Bull		70% 30%
Geographic Coverage:	Italy		

EXHIBIT VI-6

Company Name:	**Enidata spa**		
Address:	Via Medici del Vascello 26 20138 Milano, Italy		
Tel. No.:	010 39 2 52029329		
Ownership:	Public	☐	
	Private	X	
	Subsidiary	X	(Parent co.: ENI-Group)
No. of Employees:	802		
Total Revenues (1987):	150.3B Lira		
Type of Software Produced:	Systems	X	Administration, General Management Models for industrial automation
	Applications	X	Territory Management (Enidata does mainly custom software.)
Hardware Platforms:	IBM m/f UNIX	>50%	
Geographic Coverage:	Italy		

EXHIBIT VI-7

Company Name:	**SIME (Montedison)**		
Address:	Via Taramelli 28 20124 Milano, Italy		
Tel. No.:	02 62707061		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: Montedison)
No. of Employees:	304		
Total Revenues (1987):	36.6B Lira		
Type of Software Produced:	Systems	☐	
	Applications	☒	Accounting, Pay, Personnel, General Administration
Hardware Platforms:	IBM (39/90)	30%	
	Amdahl (57)	60%	
	Various		
Geographic Coverage:	Italy		

EXHIBIT VI-8

Company Name:	**Finsiel**		
Address:	Via Isonzo 21/B 00198 Roma, Italy		
Tel. No.:	06 851505		
Ownership:	Public	X	
	Private		
	Subsidiary	X	(Parent co.: IRI State owned)
No. of Employees:	2600 (Group)		
Total Revenues (1987):	575B Lira		
Type of Software Produced:	Systems	X	Systems software is one of Finsiel's new focus areas.
	Applications	X	Finsiel does mainly custom software. (Products only 3%)
Hardware Platforms:	Mainframes		
Geographic Coverage:	Mainly Italy, New branch in U.S. (San Diego)		

EXHIBIT VI-9

Company Name:	**Pirelli Informatica**		
Address:	Viale Sarca 202 20126 Milano Italy		
Tel. No.:	010 39 2 64421		
Ownership:	Public	X	
	Private	☐	
	Subsidiary	X	(Parent co.: Pirelli spa)
No. of Employees:	180		
Total Revenues (1987):	34B Lira		
Type of Software Produced:	Systems	X	Data Security : Access Control Physical integrity - data administration
	Applications	X	General administration - Finance personnel
Hardware Platforms:	IBM (m/f) Digital	98% 2%	
Geographic Coverage:	Italy		

EXHIBIT VI-10

Company Name:	**Selesta**		
Address:	Via Meravigli 16 20123 Milano Italy		
Tel. No.:	02-800817		
Ownership:	Public	☐	
	Private	X	
	Subsidiary	X	(Parent co.: Selesta Holding)
No. of Employees:	100		
Total Revenues (1987):	20B Lira		
Type of Software Produced:	Systems	X	Software Engineering. Distributor for Software AG.
	Applications	X	Cross Industry. Also Banking Sector.
Hardware Platforms:	IBM	100%	
Geographic Coverage:	Italy		

EXHIBIT VI-11

Company Name:	**Sopin spa**		
Address:	Via del Serafico 200 00142 Roma, Italy		
Tel. No.:	06 54771		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Cofin Finanziaria)
No. of Employees:	300		
Total Revenues (1987):	32B Lira		
Type of Software Produced:	Systems	☐	
	Applications	☒	Accounting, Optical Disk Images
Hardware Platforms:	Various		
Geographic Coverage:	Italy		

EXHIBIT VI-12

Company Name:	**CDS Group (Sistemi)**		
Address:	Via Grosio 10/8 20151 Milano Italy		
Tel. No.:	02 3083941		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: CDS Finanziaria)
No. of Employees:	300		
Total Revenues (1987):	48B Lira		
Type of Software Produced:	Systems	☒	
	Applications	☒	Data Bank, Public Services, Accountancy, General admin.
Hardware Platforms:	m/f IBM UNISYS DEC (occasionally)		70% 30%
Geographic Coverage:	Italy		

EXHIBIT VI-13

Company Name:	**SIPE Optimation spa**		
Address:	Via Erminio Spalla 53 00142 Roma, Italy		
Tel. No.:	06 54761		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: BNL - Banca Nazionale del Lavoro)
No. of Employees:	280		
Total Revenues (1987):	30B Lira		
Type of Software Produced:	Systems	☐	
	Applications	☒	Banking, Insurance, Public Admin. Finance Sector Admin. Programs
Hardware Platforms:	IBM (m/f-Mini-Micro)		>50%
	Mainframe:		Siemens, Honeywell
	Mini:		Olivetti, Digital
Geographic Coverage:	Italy		

EXHIBIT VI-14

Company Name:	**Lombardia Informatica**		
Address:	P. Del Carmine 4 20121 Milano Italy		
Tel. No.:	02 85171		
Ownership:	Public	X	
	Private		
	Subsidiary	X	(Parent co.: Regione Lombardia)
No. of Employees:	250		
Total Revenues (1987):	52B Lira		
Type of Software Produced:	Systems		
	Applications	X	Public Administration (Admin - Databases - Management s/w)
Hardware Platforms:	IBM 39/90 Honeywell m/f UNIX MSDOS (PCs)	>50%	
Geographic Coverage:	Italy - Lombardia region		

EXHIBIT VI-15

Company Name:	**System Management**		
Address:	Via Brisa 3 Milano 20123, Italy		
Tel. No.:	02 866 341		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	270		
Total Revenues (1987):	21B Lira		
Type of Software Produced:	Systems	☐	
	Applications	☒	Software solutions for banks, Consultancy on UNISYS, Artificial Intelligence
Hardware Platforms:	IBM (Mainframe)		>80%
Geographic Coverage:	Italy - Esprit project for EEC		

EXHIBIT VI-16

Company Name:	**Praxis Calcolo**		
Address:	Via Paleocapa 7 Milano 20121, Italy		
Tel. No.:	02 808663		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	100		
Total Revenues (1987):	11.1B Lira		
Type of Software Produced:	Systems	☒	Mostly Cullinet products
	Applications	☒	
Hardware Platforms:	IBM Mainframe PCs (in expansion) VAX		>50%
Geographic Coverage:	Italy		

Other Leading European-Owned Software Product Companies

VII
Other Leading European-Owned Software Product Companies

Exhibits VII-1 through VII-10 provide details of those companies appearing in the top 80 list whose headquarters are not in one of the four major European countries (France, West Germany, U.K., Italy).

The ten companies in this section are based in Sweden, The Netherlands, Belgium, Switzerland and Austria.

EXHIBIT VII-1

Company Name:	**Hogia Data AB**		
Address:	Angsvagen 7 44400 Stenungsund, Sweden		
Tel. No.:	+46 303 80510		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	175		
Total Revenues (1987):	N/A		
Type of Software Produced:	Systems	☐	
	Applications	☒	Accounting and business packages
Hardware Platforms:	Predominantly machine independent Mainly PCs Minis Xenix/Unix		
Geographic Coverage:	Europe (Mainly Sweden/Scandinavia) (Offices in Scandinavian countries and U.K. plus new office in Singapore)		

EXHIBIT VII-2

Company Name:	**Programmator Foretagen AB**		
Address:	Box 20072 16120 Bromma, Sweden		
Tel. No.:	+46 8 7993500		
Ownership:	Public	X	
	Private	☐	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	2700		
Total Revenues (1987):	2000M SK		
Type of Software Produced:	Systems	X	
	Applications	X	Technical and commercial
Hardware Platforms:			
Geographic Coverage:	Sweden		

EXHIBIT VII-3

Company Name:	**Multihouse NV**		
Address:	Doesburgweg 7 2803 PL Gouda Netherlands		
Tel. No.:	+31 1820 629111		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	670		
Total Revenues (1987):	DFL 111M		
Type of Software Produced:	Systems	[ ]	
	Applications	[X]	Automation and other applications
Hardware Platforms:			
Geographic Coverage:	Mainly Netherlands		

EXHIBIT VII-4

Company Name:	**L&T Informatica**		
Address:	Winkelcentrum Woensel 84 PO Box 111 5602 BC Eindhoven Netherlands		
Tel. No.:	+31 40 411425		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☒	(Parent co.: Bouwfons (NL))
No. of Employees:	220		
Total Revenues (1987):	DFL 60M		
Type of Software Produced:	Systems	☐	
	Applications	☒	Government, production, education
Hardware Platforms:	IBM		
Geographic Coverage:	Netherlands		

EXHIBIT VII-5

Company Name:	**Orda-B NV**		
Address:	Interleuvenlaan 27 3030 Heverlee-Leuven Belgium		
Tel. No.:	+32 16 280211		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	300		
Total Revenues (1987):	1000M BF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Finance, stock control, pay.
Hardware Platforms:	Mainly IBM		
Geographic Coverage:	Mainly Belgium		

EXHIBIT VII-6

Company Name:	**Administra**		
Address:	Raketstraat 60 1130 Brussels, Belgium		
Tel. No.:	+32 2 2162855		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Belgian State)
No. of Employees:	570		
Total Revenues (1987):	570M BF		
Type of Software Produced:	Systems	☒	Systems control
	Applications	☒	Accounting, stock control
Hardware Platforms:	IBM Mainframes		
Geographic Coverage:	Belgium; some export		

EXHIBIT VII-7

Company Name:	**Winter Partners AG**		
Address:	Flora Strasse 44 8008 Zurich, Switzerland		
Tel. No.:	+41 1 695440		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	200		
Total Revenues (1987):	30M SF		
Type of Software Produced:	Systems	[ ]	
	Applications	[X]	Banking/Finance
Hardware Platforms:	DEC VAX IBM 43XX, 30XX, PC Unisys		
Geographic Coverage:	Worldwide		

EXHIBIT VII-8

Company Name:	**ISAG (Industrie Software AG)**		
Address:	Dufour Strasse 181, Postfach 8034 Zurich, Switzerland		
Tel. No.:	+41 1 558577		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: five companies jointly own ISAG)
No. of Employees:	200		
Total Revenues (1987):	26M SF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Industry
Hardware Platforms:	Various		
Geographic:	Switzerland (all areas)		

EXHIBIT VII-9

Company Name:	**Voest Alpine AG**		
Address:	4010 Linz, Postfach 2 Austria		
Tel. No.:	+43 732 276405		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	74		
Total Revenues (1987):	130M Shillings		
Type of Software Produced:	Systems	[ ]	
	Applications	[X]	Industrial Commercial
Hardware Platforms:	Various		
Geographic Coverage:	Austria		

EXHIBIT VII-10

Company Name:	**Management Data**		
Address:	Technisches Zentrum der CA Julius Tandler Platz 3, A-1090 Vienna, Austria		
Tel. No.:	+43 1 3135 2482		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Creditanstalt)
No. of Employees:	80		
Total Revenues (1987):	164M Shillings		
Type of Software Produced:	Systems	☐	
	Applications	☒	International banking software
Hardware Platforms:	PCs and mainframes (Mainly IBM)		
Geographic Coverage:	Worldwide		

VIII

Potentially Important Smaller Companies

VIII
Potentially Important Smaller Companies

Exhibits VIII-1 through VIII-20 provide details on 20 European-owned software product companies that do not feature in the top-80 listing, but may be potentially interesting to Digital. Among the reasons these companies may be of interest are:

- Strong growth record
- Involved in new or emerging technologies
- Strong position in a particular niche market

Some companies are also included that are significant in size, but whose software product revenues are estimated to be marginally lower than the level required for the top-80 list.

EXHIBIT VIII-1

Company Name:	**Progilog**		
Address:	24-26 rue Louis Armand 75015 Paris, France		
Tel. No:	+33 1 4060 0512		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Progifin)
No of Employees:	60		
Total Revenues (1987):	43M FF		
Type of Software Produced:	Systems	☒	Software engineering Expert system generator
	Applications	☐	
Hardware Platforms:			
Geographic Coverage:	Europe and French-speaking Africa (foreign offices in Brussels and Geneva)		
Comments:	Progilog is highly involved in R&D in expert systems and 4GL area.		

EXHIBIT VIII-2

Company Name:	**Compagnie Europeene de Progiciel**		
Address:	25 rue de Berri 75008 Paris France		
Tel. No.:	+31 1 43590324		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	21		
Total Revenues (1987):	36M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Integrated management and production packages
Hardware Platforms:			
Geographic Coverage:	Worldwide (mainly Europe)		
Comments:	CEP has a very high turnover per employee. The company operates worldwide and works closely with research centres in many countries.		

EXHIBIT VIII-3

Company Name:	**Prodstar SA**		
Address:	45 Quai de la Seine 75019 Paris, France		
Tel. No.:	42 41 88 55		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	55		
Total Revenues (1987):	35M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Prodstar Mrp - production control product - available in 6 languages
Hardware Platforms:	HP, IBM 36, 38, 6150 DEC, Siemens, Bull IBM PC and compatibles Wang, Bull Unix		
Geographic Coverage:	Subsidiaries in Germany, Spain, U.S., plus distributors elsewhere.		
Comments:	66% revenue growth in 1987; high profitability.		

EXHIBIT VIII-4

Company Name:	**ASTR**		
Address:	193 Tour de l'Europe 68100 Mulhouse France		
Tel. No.:	89 45 55 21		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	55		
Total Revenues (1987):	33M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Commercial/financial/production - specialising in Digital equipment
Hardware Platforms:	Digital	100%	
Geographic Coverage:	94% France		
Comments:	High revenue and profit growth. Also involved in education and training using video-disc technology.		

EXHIBIT VIII-5

Company Name:	**Alpha Informatique**		
Address:	20 Avenue Francis-Bouet 49306, Cholet Cedex France		
Tel. No.:	41 65 21 86		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: Plan to join Segin Group)
No. of Employees:	140		
Total Revenues (1987):	42M FF		
Type of Software Produced:	Systems	☐	
	Applications	☒	Accounting, finance, personnel, CAD/CAM stock control
Hardware Platforms:	IBM PC 36, 38 93 XX		
Geographic Coverage:	Mainly France		
Comments:	40% revenue growth in 1987.		

EXHIBIT VIII-6

Company Name:	**Europe Informatique**		
Address:	12, rue Godot de Mauroy, 75009 Paris, France		
Tel. No.:	42 65 10 10		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	100		
Total Revenues (1987):	35M FF		
Type of Software Produced:	Systems	☒	Communication between PCs and with IBM mainfames; data recovery
	Applications	☒	Data Analysis; trade fair management
Hardware Platforms:	IBM mainframes, Pick systems		
Geographic Coverage:	Mainly France		
Comments:	Software products is one of Europe Informatique's key focus areas. This activity was started in 1985 and is growing quickly.		

EXHIBIT VIII-7

Company Name:	**B & S Multisoft GmbH**
Address:	Universitatsstrasse 74 4630 Bochum 1 W. Germany
Tel. No.:	+49 234 37481
Ownership:	Public ☐ Private ☒ Subsidiary ☐ (Parent co.: _____)
No. of Employees:	31
Total Revenues (1987):	6.1M DM
Type of Software Produced:	Systems ☐ Applications ☒ Office automation
Hardware Platforms:	PCs under OS/2 and MSDOS 85% Unix/Xenix 12% DEC (VMS) 3%
Geographic Coverage:	Considerable export activity.

EXHIBIT VIII-8

Company Name:	**Brainware GmbH**		
Address:	Gustav-Meyer-Allee 1000 Berlin 65 W Germany		
Tel. No.:	+49 30 4633048/49		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: 29% owned by TVM - venture capital co.)
No. of Employees:	20		
Total Revenues (1987):	1.5M DM		
Type of Software Produced:	Systems	☒	Expert systems/artifical intelligence
	Applications	☐	
Hardware Platforms:	Predominantly PCs Also LISP and Unix machines and mainframes		
Geographic Coverage:	Mainly W. Germany		
Comments:	Founded in 1985; share taken by venture capital co. in 1987.		

EXHIBIT VIII-9

Company Name:	**LG Software Ltd**		
Address:	Copthall Bridge House 1 East Parade, Harrogate N Yorkshire HG1 5LF		
Tel. No.:	(0423) 524151		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Sherwood Computer Services)
No. of Employees:	130		
Total Revenues (1987):	£5M		
Type of Software Produced:	Systems	☐	
	Applications	☒	Local authority software. Most successful products: 'Rentman' and 'Rateman'
Hardware Platforms:	ICL 50%		
Geographic Coverage:	U.K.		
Comments:	LG is the only U.K. software house to specialise in the local authority market. Taken over by Sherwood in February 1987. Has had some recent problems (July 1988)		

EXHIBIT VIII-10

Company Name:	**Trifid Software Ltd**		
Address:	Woodside Park Chelford Road, Congleton Cheshire CW12 2LY		
Tel. No.:	(0260) 280601		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Kewill Systems plc)
No. of Employees:	150*		
Total Revenues (1987):	£9M*		
*including Kewill Systems			
Type of Software Produced:	Systems	☒	Pick based operating system ('Ultimate 370')
	Applications	☒	Integrated Business System ('IBS') for manufacturing
Hardware Platforms:	Mainly IBM mainframes		
Geographic Coverage:	Worldwide (mostly U.K.)		
Comments:	Trifid bought by Kewill in November 1987.		

EXHIBIT VIII-11

Company Name:	**Abtex Holdings Ltd**		
Address:	58-60 Carden Place Aberdeen AB1 1UP		
Tel. No.:	(0224) 647074		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	c.60		
Total Revenues (1987):	£1M (= U.K. revenues of Abtex Software subsidiary)		
Type of Software Produced	Systems	[ ]	
	Applications	[X]	Major product - 'Pertmaster' - project management (from Abtex Software Limited)
Hardware Platforms:	IBM PCs Plans for Unix and OS/2		
Geographic Coverage:	Worldwide		
Comments:	Planning rapid expansion. Abtex Software plans to change its name to Pertmaster International.		

EXHIBIT VIII-12

Company Name:	**Misys Dateller**		
Address:	Buckholt Drive, Warndon Worcester WR4 9SR		
Tel. No.:	(0905) 754455		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Misys plc (USM))
No. of Employees:	164		
Total Revenues (1987):	£6M		
Type of Software Produced:	Systems	☒	BOS products
	Applications	☒	Financial, insurance
Hardware Platforms:	Most computers		
Geographic Coverage:	U.K. (plans for U.S. and Australia)		
Comments:	Misys recently (June 1988) bought BOS Software. The company is planning more expansion through acquisition.		

EXHIBIT VIII-13

Company Name:	**Computer Toepassing Bouwezen (CTB)**		
Address:	Galvanistraat 1, PO Box 239 6710 BE, Ede Netherlands		
Tel. No.:	010 31 8380 70111		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	200		
Total Revenues (1987):	8M DFL		
Type of Software Produced:	Systems	[ ]	
	Applications	[X]	Calculation programmes, CAD/CAM, financial administration
Hardware Platforms:	IBM NCR Unix		
Geographic Coverage:	Netherlands only		

EXHIBIT VIII-14

Company Name:	**ICS Instituut vor Computersoftware**		
Address:	Europalaan 530 3526 KS Utrecht Netherlands		
Tel. No.:	010 31 30 892872		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	360		
Total Revenues (1987):	60M DFL		
Type of Software Produced:	Systems	☐	
	Applications	☒	Financial management system (for AS400) Sales administration (AS40and 36) Admittance control and time registration control telefax interface (replaces telex machine and s/w)
Hardware Platforms:	IBM		
Geographic Coverage:	Netherlands		

EXHIBIT VIII-15

Company Name:	**Systime AG**		
Address:	Universitatsstrasse 86 8006 Zurich Switzerland		
Tel. No.:	+41 1 3634566		
Ownership:	Public	[X]	
	Private	[ ]	
	Subsidiary	[ ]	(Parent co.: _____)
No. of Employees:	32		
Total Revenues (1987):	5.4M SF		
Type of Software Produced:	Systems	[X]	For users and software/systems houses with DEC VAX machines
	Applications	[X]	Commercial packages
Hardware Platforms:	Mainly DEC VAX		
Geographic Coverage:	Systime has clients in many European countries.		
Comments:	Almost 100% growth in 1987.		

EXHIBIT VIII-16

Company Name:	**Systor AG**		
Address:	Jungholzstrasse 43 8050 Zurich Switzerland		
Tel. No.:	+41 1 3014844		
Ownership:	Public	☐	
	Private	☐	
	Subsidiary	☒	(Parent co.: Schweizerische Treuhandges)
No. of Employees:	130		
Total Revenues (1987):	c.23M SF		
Type of Software Produced:	Systems	☒	Application Development Product 'Sapiens'
	Applications	☐	
Hardware Platforms:	Mainly IBM		
Geographic Coverage:	Mainly Switzerland, Office in U.K.		

EXHIBIT VIII-17

Company Name:	**Dillon Technology Limited**
Address:	43 Molesworth Street Dublin 2 Ireland
Tel. No.:	+353 1 712 570
Ownership:	Public ☐
	Private ☒
	Subsidiary ☐ (Parent co.: _____)
No. of Employees:	35
Total Revenues (1987):	£750,000
Type of Software Produced:	Systems ☐
	Applications ☒ Multicurrency and treasury management
Hardware Platforms:	MS-DOS Xenix VAX and mainframe versions planned
Geographic Coverage:	U.K. & Ireland 50% Gulf region Scandinavia
Comments:	Rapid growth (50-60% p.a.) planned. Aiming for stock market within three years.

EXHIBIT VIII-18

Company Name:	**Software Laboratories**		
Address:	Seaview Court, Strand Road Bray, Co. Wicklow Ireland		
Tel. No.:	+353 1 860500		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:			
Total Revenues (1987):			
Type of Software Produced:	Systems	☐	
	Applications	☒	'Unigem' real-time accounting package
Hardware Platforms:	Unix 100%		
Geographic Coverage:	Worldwide		
Comments:	Software Laboratories has won a number of large OEM deals for Unigem, including a £17M contract from NEC in Australia.		

EXHIBIT VIII-19

Company Name:	**Kindle Group**		
Address:	36 Blessington Street Dublin 1 Ireland		
Tel. No.:	+353 1 300955		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	83		
Total Revenues (1987):			
Type of Software Produced:	Systems	☐	
	Applications	☒	Financial services software (mainly banking)
Hardware Platforms:	Was 100% ICL Now also MS DOS		
Geographic Coverage:	Ireland 4%, U.K. 32%, Outside of Europe 64%		
Comments:	Kindle sells its products worldwide, but supports all customers directly from its headquarters in Dublin.		

EXHIBIT VIII-20

Company Name:	**TAO SA**		
Address:	Paseo de Gracia 88 Principal 5o Planta 08008 Barcelona Spain		
Tel. No.:	+34 93 2151032		
Ownership:	Public	☐	
	Private	☒	
	Subsidiary	☐	(Parent co.: _____)
No. of Employees:	55		
Total Revenues (1987):	300M Ptas		
Type of Software Produced:	Systems	☐	
	Applications	☒	Products for regional governments
Hardware Platforms:			
Geographic Coverage:	Spain		
Comments:	Very fast-growing company		

A

Appendix: Definitions

A
Appendix: Definitions

Software Products - This includes users' purchases of applications and systems packages for use on in-house computer systems. Included are lease and purchase expenditures, as well as fees for work performed by the vendor to implement and maintain the packages at the users' sites. Fees for work performed by organisations other than the package vendor are counted in professional services. There are several subcategories of software products.

- Applications Products - Software that performs processing to service user functions. They consist of:
  - Cross-Industry Products - Used in multiple-user industry sectors. Examples are payroll, inventory control, and financial planning.
  - Industry-Specific Products - Used in a specific industry sector, such as banking and finance, transportation, or discrete manufacturing. Examples are demand deposit accounting and airline scheduling.
- Systems Products - Software that enables the computer/communications systems to perform basic functions. They consist of:
  - Systems Control Products - Function during applications program execution to manage the computer system resource. Examples include operating systems, communication monitors, emulators, and spoolers.
  - Data Center Management Products - Used by operations personnel to manage the computer system resources and personnel more effectively. Examples include performance measurement, job accounting, computer operations, scheduling, and utilities.
  - Applications Development Products - Used to prepare applications for execution by assisting in designing, programming, testing, and related functions. Examples include languages, sorts, productivity aids, data dictionaries, database management systems, report writers, project control systems, and retrieval systems.